

**IN THE CLAIMS:**

1. (currently amended) A compound of the general formula:  $R^1R^2R^4MR^5$ , wherein  $R^1$ ,  $R^2$  and  $R^4$  are independently an aryl, alkyl, alkenyl, epoxy or alkynyl group, wherein at least one of  $R^1$ ,  $R^2$  and  $R^4$  is fully or partially fluorinated, wherein M is ~~selected from group 14 of the periodic table~~ Si or Ge, and wherein  $R^5$  is either an alkoxy group,  $OR^3$ , where  $R^3$  is an alkyl group having from 1 to 4 carbons, or a halogen group, X.

2. (original) The compound of claim 1, wherein X is Br or Cl.

3. (currently amended) The compound of claim 1, wherein  ~~$R^1$ ,  $R^2$  and/or  $R^4$~~   $R^1$ ,  $R^2$  and/or  $R^4$  is fully fluorinated.

4. (currently amended) The compound of claim 3, wherein  ~~$R^1$ ,  $R^2$  and/or  $R^4$~~   $R^1$ ,  $R^2$  and/or  $R^4$  is an alkenyl or alkynyl group.

5. (currently amended) The compound of claim 1, wherein  ~~$R^1$ ,  $R^2$  and/or  $R^4$~~   $R^1$ ,  $R^2$  and/or  $R^4$  is an alkyl group having from 1 to 14 carbons, vinyl or allyl group.

6. (currently amended) The compound of claim 1, wherein ~~R1,~~  
~~R2 and/or R4~~ R<sup>1</sup>, R<sup>2</sup> and/or R<sup>4</sup> is an alkenyl group.

7. (currently amended) The compound of claim 1, wherein ~~R1,~~  
~~R2 and/or R4~~ R<sup>1</sup>, R<sup>2</sup> and/or R<sup>4</sup> is a fully fluorinated alkenyl group.

8. (currently amended) The compound of claim 1, wherein ~~R1,~~  
~~R2 and/or R4~~ R<sup>1</sup>, R<sup>2</sup> and/or R<sup>4</sup> is an aryl group having one or more  
rings, or an alkyl group having from 1 to 14 carbons.

9. (currently amended) The compound of claim 1, wherein ~~R1,~~  
~~R2 and/or R4~~ R<sup>1</sup>, R<sup>2</sup> and/or R<sup>4</sup> is an alkynyl group.

10. (currently amended) The compound of claim 1, ~~wherein R5~~  
wherein R<sup>5</sup> is an alkoxy ~~groups~~ group.

11. (currently amended) The compound of claim 1, ~~wherein R5~~  
wherein R<sup>5</sup> is a halogen group.

12. (currently amended) The compound of claim 1, ~~wherein R1~~  
wherein R<sup>1</sup> is a fully or partially fluorinated phenyl group

substituted with fully or partially fluorinated methyl, vinyl or ethyl groups.

13. (canceled)

14. (canceled)

15. (original) The compound of claim 1, wherein X is Cl.

16. (original) The compound of claim 1, wherein X is Br.

17. (currently amended) The compound of claim 1, ~~wherein R5~~  
wherein R<sup>5</sup> is methoxy.

18. (currently amended) The compound of claim 1, ~~wherein R5~~  
wherein R<sup>5</sup> is an ethoxy or chlorine group.

19. (currently amended) The compound of claim 1, wherein ~~R1,~~  
~~R2 and/or R4~~ R<sup>1</sup>, R<sup>2</sup> and/or R<sup>4</sup> is a C2+straight chain or C3+branched chain.

20. (currently amended) The compound of claim 1, wherein ~~R<sub>1</sub>, R<sub>2</sub> and/or R<sub>4</sub>~~ R<sup>1</sup>, R<sup>2</sup> and/or R<sup>4</sup> is a perfluorinated organic group having an unsaturated double bond.

21. (currently amended) The compound of claim 1, wherein ~~R<sub>1</sub>, R<sub>2</sub> and/or R<sub>4</sub>~~ R<sup>1</sup>, R<sup>2</sup> and/or R<sup>4</sup> is an epoxy group.

22. (currently amended) The compound of claim 1, wherein ~~R<sub>1</sub>, R<sub>2</sub> and/or R<sub>4</sub>~~ R<sup>1</sup>, R<sup>2</sup> and/or R<sup>4</sup> is an acrylate group.

23. (canceled)

24. (currently amended) The compound of claim 1, wherein ~~R<sub>1</sub>, R<sub>2</sub> and/or R<sub>4</sub>~~ R<sup>1</sup>, R<sup>2</sup> and/or R<sup>4</sup> is vinyl.

25. (currently amended) The compound of claim 24, wherein ~~R<sub>1</sub>, R<sub>2</sub> and/or R<sub>4</sub>~~ R<sup>1</sup>, R<sup>2</sup> and/or R<sup>4</sup> is fully fluorinated vinyl.

26. (currently amended) The compound of claim 1, ~~wherein R<sub>5</sub>~~ wherein R<sup>5</sup> is a methoxy, ethoxy or propoxy, M is Si ~~and R<sub>1</sub> and R<sup>1</sup>~~ is perfluorinated phenyl or perfluorinated vinyl.

27. (currently amended) The compound of claim 1, ~~wherein R<sup>5</sup>~~  
wherein R<sup>5</sup> is bromine or chlorine, M is Si, ~~and R<sup>1</sup>~~ and R<sup>1</sup> is  
perfluorinated phenyl.

28. (currently amended) The compound of claim 1, ~~wherein R<sup>4</sup>~~  
~~and R<sup>5</sup>~~ wherein R<sup>4</sup> and R<sup>5</sup> are ethoxy, M is Si, ~~and R<sup>1</sup>~~ and R<sup>1</sup> is  
perfluorinated phenyl, or perfluorinated alkyl having from 2 to 8  
carbons.

29. (currently amended) The compound of claim 28, wherein ~~R<sup>1</sup>,~~  
~~R<sup>2</sup> and/or R<sup>4</sup>~~ R<sup>1</sup>, R<sup>2</sup> and/or R<sup>4</sup> is perfluorinated ethyl or propyl.

30. (currently amended) The compound of claim 1, ~~wherein OR<sup>3</sup>~~  
wherein OR<sup>3</sup> is methoxy or ethoxy.

31. (currently amended) The compound of claim 1, ~~wherein OR<sup>3</sup>~~  
wherein OR<sup>3</sup> is ethoxy.

32. (currently amended) The compound of claim 1, wherein ~~R<sup>1</sup>,~~  
~~R<sup>2</sup> and/or R<sup>4</sup>~~ R<sup>1</sup>, R<sup>2</sup> and/or R<sup>4</sup> is a fully or partially fluorinated  
single ring or polycyclic aromatic substituent.

33. (currently amended) The compound of claim 32, wherein ~~R<sup>1</sup>~~  
~~and/or R<sup>4</sup>~~ R<sup>1</sup> and/or R<sup>4</sup> has one or two rings.

34. (original) The compound of claim 1, wherein M is Si.

35. (currently amended) The compound of claim 1, ~~wherein R<sup>1</sup>~~  
wherein R<sup>1</sup> is methyl.

36. (currently amended) The compound of claim 1, ~~wherein R<sup>1</sup>~~  
wherein R<sup>1</sup> is ethyl.

37. (currently amended) The compound of claim 1, ~~wherein R<sup>1</sup>~~  
wherein R<sup>1</sup> is propyl.

38. (currently amended) The compound of claim 1, ~~wherein R<sup>1</sup>~~  
wherein R<sup>1</sup> is an alkenyl group ~~and R<sup>4</sup>~~ and R<sup>4</sup> is an aryl group.

39. (currently amended) The compound of claim 1, ~~wherein R<sup>1</sup>~~  
wherein R<sup>1</sup> is an epoxy group ~~and R<sup>4</sup>~~ and R<sup>4</sup> is an aryl group.

40. (currently amended) The compound of claim 1, ~~wherein R<sup>1</sup>~~  
wherein R<sup>1</sup> is an alkynyl group ~~and R<sup>4</sup>~~ and R<sup>4</sup> is an aryl group.

41. (currently amended) The compound of claim 1, ~~wherein R<sup>1</sup>~~  
wherein R<sup>1</sup> has an unsaturated double bond, ~~and R<sup>4</sup>~~ and R<sup>4</sup> has a ring  
structure.

42. (currently amended) The compound of claim 1, ~~wherein R<sup>1</sup>~~  
wherein R<sup>1</sup> is an alkenyl group ~~and R<sup>4</sup>~~ and R<sup>4</sup> is an alkyl group.

43. (currently amended) The compound of claim 42, ~~wherein R<sup>1</sup>~~  
wherein R<sup>1</sup> is an alkenyl group ~~and R<sup>4</sup>~~ and R<sup>4</sup> is an alkyl group  
having 4 or more carbons.

44. (currently amended) The compound of claim 1, ~~wherein R<sup>1</sup>~~  
wherein R<sup>1</sup> is an epoxy group ~~and R<sup>4</sup>~~ and R<sup>4</sup> is an alkyl group.

45. (currently amended) The compound of claim 44, ~~wherein R<sup>4</sup>~~  
wherein R<sup>4</sup> is an alkyl group having 4 or more carbons.

46. (currently amended) The compound of claim 1, ~~wherein R<sup>1</sup>~~  
wherein R<sup>1</sup> is an alkynyl group ~~and R<sup>4</sup>~~ and R<sup>4</sup> is an alkyl group.

47. (currently amended) The compound of claim 1, ~~wherein R<sup>1</sup>~~  
wherein R<sup>1</sup> is a vinyl group ~~i and R<sup>4</sup>~~ and R<sup>4</sup> is an aryl group.

48. (currently amended) The compound of claim 47, ~~wherein R<sup>4</sup>~~  
wherein R<sup>4</sup> is a phenyl group.

49. (original) The compound of claim 48, wherein the  
phenyl group is a substituted phenyl group.

50. (currently amended) The compound of claim 1, ~~wherein R<sup>1</sup>~~  
wherein R<sup>1</sup> is a methyl group ~~and R<sup>4</sup>~~ and R<sup>4</sup> is a vinyl or epoxy  
group.

51. (currently amended) The compound of claim 1, wherein ~~both~~  
~~R<sup>1</sup>, R<sup>2</sup> and R<sup>4</sup> are~~ each of R<sup>1</sup>, R<sup>2</sup> and R<sup>4</sup> is fully fluorinated.

52. (currently amended) The compound of claim 1, wherein one  
of ~~R<sup>1</sup>, R<sup>2</sup> and R<sup>4</sup>~~ R<sup>1</sup>, R<sup>2</sup> and R<sup>4</sup> is fully fluorinated and the other is  
partially fluorinated.

53. (original) The compound of claim 52, wherein the  
partially fluorinated group is an alkyl group having four or more  
carbon atoms, and wherein the fully fluorinated group is an alkenyl  
or aryl group.



54. (canceled)

55. (canceled)

56. (canceled)

57. (currently amended) The compound of claim 1, wherein ~~R<sup>1</sup>~~ and ~~R<sup>2</sup>~~ R<sup>1</sup> and R<sup>2</sup> are the same, but different ~~from R<sup>4</sup>~~ from R<sup>4</sup>.

58. (currently amended) The compound of claim 1, wherein ~~R<sup>1</sup>~~, ~~R<sup>2</sup>~~ and ~~R<sup>4</sup>~~ R<sup>1</sup>, R<sup>2</sup> and R<sup>4</sup> are the same.

59. (currently amended) The compound of claim 1, wherein ~~R<sup>1</sup>~~, ~~R<sup>2</sup>~~ and ~~R<sup>4</sup>~~ R<sup>1</sup>, R<sup>2</sup> and R<sup>4</sup> are each different from each other.

60. (currently amended) A method for making the compound R<sup>1</sup>R<sup>2</sup>R<sup>4</sup>MR<sup>5</sup> of claim 1, comprising: providing a compound ~~R<sup>1</sup>MOR<sup>3</sup>X<sub>q-3-q</sub>~~ R<sup>1</sup>MOR<sup>3</sup>X<sub>q-3-q</sub> where M is ~~an element selected from group 14 of the periodic table~~ Si or Ge, OR<sup>3</sup> is an alkoxy group having 1 to 4 carbons, X is a halogen and q is 2 or 3; reacting the compound ~~R<sup>1</sup>MOR<sup>3</sup>X<sub>q-3-q</sub>~~ R<sup>1</sup>MOR<sup>3</sup>X<sub>q-3-q</sub> with either a) Mg and ~~R<sup>2</sup>X<sup>2</sup>~~ R<sup>2</sup>X<sup>2</sup> where ~~X<sup>2</sup>~~ X<sup>2</sup> is Cl, Br or I and ~~R<sup>1</sup>~~ and R<sup>2</sup> is an alkyl, alkenyl, aryl, epoxy

or alkynyl group, and  $q=3$ , or b) with  ~~$R^2M^1$~~   $R^2M^1$  ~~where  $R^2$~~  where  $R^2$  is an alkyl, alkenyl, aryl, epoxy or alkynyl group ~~and  $M^1$~~  and  $M^1$  is an element from group 1 of the periodic table, and  $q=2$  or  $3$ ; so as to form  ~~$R^1R^2MOR^3$~~ ,  $R^1R^2MOR^3$ ; reacting  ~~$R^1MOR^3$~~ ,  $R^1R^2MOR^3$ , with a) Mg ~~and  $R^4X^2$~~  and  $R^4X^2$  ~~where  $X^2$~~  where  $X^2$  is Cl, Br or I ~~and  $R^4$~~  and  $R^4$  is an alkyl, alkenyl, aryl, epoxy or alkynyl group, or b) ~~with  $R^4M^1$~~  with  $R^4M^1$  ~~where  $R^4$~~  where  $R^4$  is an alkyl, alkenyl, aryl, epoxy or alkynyl group and ~~wherein  $R^4$~~  wherein  $R^4$  is fully or partially fluorinated ~~and  $M^1$~~  and  $M^1$  is an element from group 1 of the periodic table, or c) with a halogen or halogen compound followed by reacting ~~with  $R^4M^1$~~  with  $R^4M^1$  ~~where  $R^2$~~  where  $R^4$  is an alkyl, alkenyl, aryl, epoxy or alkynyl group, ~~wherein  $M^1$~~  wherein  $M^1$  is an element from group 1 of the periodic table; so as to form  ~~$R^1R^2R^4MOR^3$~~ ,  $R^1R^2R^4MOR^3$ ; and wherein if  $R^5$  is a halogen, reacting  $R^1R^2R^4MOR^3$  with a halogen or halogen compound.

61. (currently amended) A method for preparing a polymer using the compound of claim 1, comprising: providing the compound of claim 1; hydrolyzing the compound of claim 1 in the presence of  ~~$H_2O$  or  $D_2O$~~   $H_2O$  or  $D_2O$  with ~~another compound; so as to form a compound~~ a compound which together with the compound of claim 1 forms a polymer with an -M-O-M-O- backbone with at least the  $R^1$ ,  $R^2$

and R4 groups of the compound of claim 1 bound thereto and having a weight average molecular weight of from 500 to 10,000.

62. (currently amended) The method of claim 61, wherein the compound has a weight average molecular weight of from 1500 to 5000.